



#7

PATENT
Attorney Docket No. 13119-1-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of)	Examiner: J. Rivell
DUNMIRE)	Art Unit No. 347
Serial No. 07/650,799)	DECLARATION
Filed: February 5, 1991)	37 C.F.R. § 1.132
For: N-SHAPED BACKFLOW)	
PREVENTOR)	

Seattle, Washington 98101

Hon. Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Dear Sir:

The undersigned declares as follows:

1. I am an inventor of the above-identified application. I have supervised tests of pressure head loss comparing head loss in an apparatus similiar to that depicted in Fig. 9 of the above-identified application, having a single clapper valve, with head loss in a structure identical except for the deletion of the clapper valve. The test results are summarized in the graph attached hereto as Exhibit A. The points shown on the graph depict the amount of pressure loss between points depicted in Fig. 9 as 272a and 272b. The curve indicated by squares on Exhibit A show the head loss for an apparatus with a single clapper valve configured similar to the valve 12 depicted in Fig. 9. The points on the curve indicated by asterisks are the results for corresponding measurements in a device identical except that the clapper 32 was removed.

At flow rates lower than the normal, design flow range the clapperless device had lower head loss. However, in the flow rate range greater than about 375 gallons per minute (gpm), which

DUNMIRE
Serial No. 07/650,799
Page 2

includes the design flow range, the head loss in the apparatus of the present invention is less than head loss of a device in which the clapper has been removed.

As seen from the data shown in Exhibit A, in the design flow range, the present invention provides a lower head loss than an apparatus which does not include the present invention.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

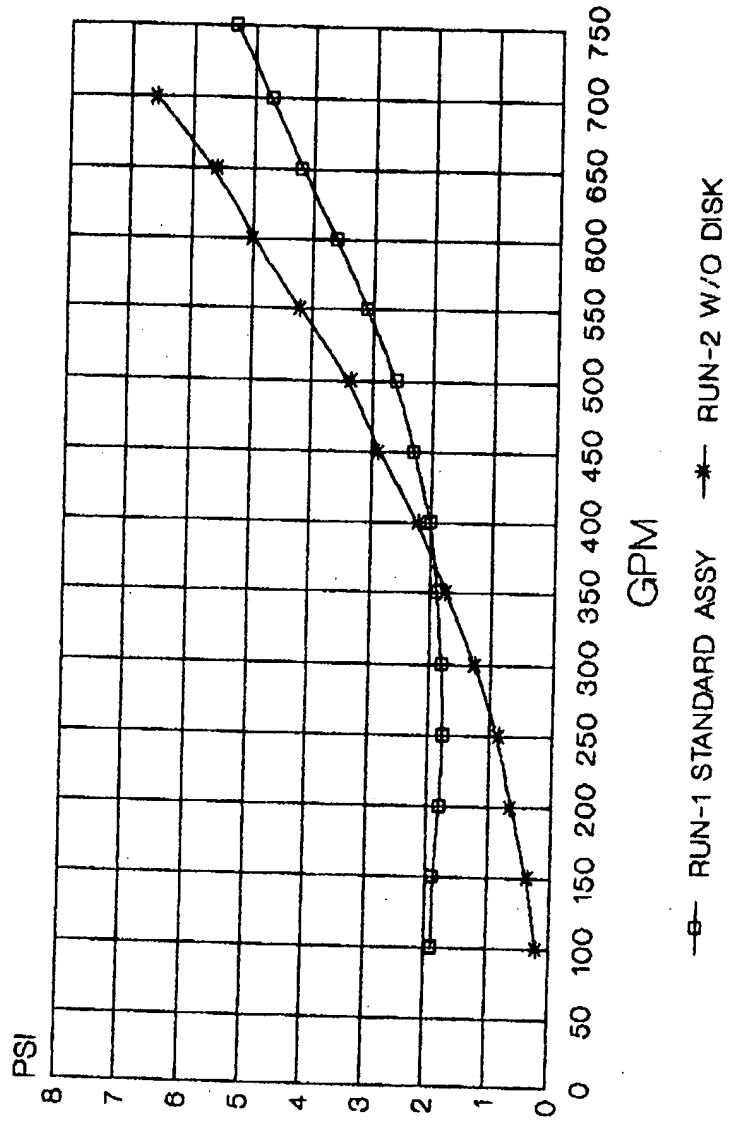
Date: OCTOBER 8, 1991


Charles W. Dunmire

Enclosure:
Exhibit A

a:13119-11.dec

HEADLOSS CURVE 800-4" DETECTOR CHECK



#910220A